

IN THE CLAIMS

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1, 2, 9, 10, 14, and 24 are amended.

Claims 4, 12, 13, 19 - 22, and 26 -34 are cancelled.

Claims 1 -3, 5 - 11, 14 - 18, and 23 - 25 are pending.

Listing of Claims:

1. (Currently Amended) An actuated leg prosthesis for replacement of an amputated limb a leg of an above knee amputee, the prosthesis comprising:

a primary joint knee member;

a socket connector assembly for connecting a socket to said primary joint knee member;

an elongated structural member having opposite ends spaced apart along a main longitudinal axis;

a connector assembly for connecting a terminal portion to one end of said structural member;

a pivot assembly for operatively connecting the structural member to the primary joint knee member to permit relative rotation between said primary joint knee member and said structural member about an first axis defined by said pivot assembly; and

a linear actuator comprising a rotary motor and drive member, a screw rotatable by said rotary motor and a follower displaceable along said screw upon rotation thereof by said rotary motor, said rotary motor being pivotally connected to said structural member and

said ~~drive member~~ follower being pivotally connected to said primary joint knee member at a location spaced from said pivot assembly,

whereby ~~extension or retraction of said actuator induces rotation of said rotary motor rotates said screw in or out of said follower thereby causing a corresponding rotation of~~ said primary joint knee member relative to said structural member about said pivotal axis.

2. (currently amended) The prosthesis according to claim 1, wherein: said actuator is connected to said primary joint knee member and said structural member by respective pivotal connections having pivot axes substantially parallel to and spaced from said first axis.
3. (Original) The prosthesis according to claim 1, wherein said actuator is located within said structural member.
4. (Cancelled)
5. (Original) The prosthesis according to claim 3 wherein said structural member includes a hollow shell and said actuator is located within said shell.
6. (Original) The prosthesis according to claim 5 wherein said shell is formed from an open channel member and a detachable closure.
7. (Original) The prosthesis according to claim 5 wherein an energy storage module is supported on said shell.
8. (Previously presented) The prosthesis according to claim 5 wherein a circuit board is supported on said shell.

9. (currently amended) The prosthesis according to claim 1, ~~wherein said prosthesis is a leg for use by an above knee amputee and further comprising an artificial foot attached to said connector assembly a distal end of the structural member~~, the artificial foot defining a front side and a rear side of the prosthesis.
10. (currently amended) The prosthesis according to claim 9, wherein one end of the actuator is connected to said primary joint knee member forwardly of said first pivot axis.
11. (Original) The prosthesis according to claim 3, wherein the structural member includes a back plate extending between opposite ends of said structural member.
12. (Cancelled)
13. (Cancelled)
14. (currently amended) The prosthesis according to claim 9, further comprising a socket attached to said primary joint knee member.
15. (Original) The prosthesis according to claim 1, further comprising a controller for controlling the actuator.
16. (Original) The prosthesis according to claim 15, wherein said controller outputs control signals to said actuator in response to input signals from proprioceptors.
17. (Previously Amended) The prosthesis according to claim 16 , wherein the controller has an output connected to a power drive, the power drive supplying electrical energy to the actuator, from a power source, in response to the control signals.

18. (Previously Amended) The prosthesis according to claim 16, wherein the input signals further comprise signals from sensors mounted on said actuator.
19. (Cancelled)
- 20 (Cancelled)
21. (Cancelled)
22. (Cancelled)
23. (Previously Amended) The prosthesis according to claim 1 wherein a load sensor is interposed between said actuator and one of said members to provide an indication of loads imposed on said prosthesis.
24. (currently amended) The prosthesis according to claim 1 including a sensor to provide an indication of relative motion between said primary joint knee member and said structural member.
25. (Previously Amended) The prosthesis of claim 24 wherein said sensor is an optical sensor.
26. (Cancelled)
27. (Cancelled)
28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

IN THE DRAWINGS:

The attachment sheets of drawings include changes to Fig. 16 and Fig. 17. These sheets replace the original sheets including Fig. 16 and Fig. 17. In Fig. 16, previously omitted reference numeral 340 and leader line has been added. In Fig. 17, previously omitted reference numeral 92' and leader line has been added. These elements were discussed in the specification. No new matter has been added.

Attachment: Replacement Sheets (2 Sheets)
 Annotated Sheets Showing Changes (2 Sheets)